

## **Postdoctoral Scholar– Bioinformatics/ Integrative Genomics**

### **Description:**

The University of Chicago is seeking a talented, self-motivated individual to participate in cutting edge research as a member of the Moskowitz Lab ([moskowitzlab.uchicago.edu/](http://moskowitzlab.uchicago.edu/)) at the Pediatrics Department. The successful applicant will be part of an interdisciplinary team led by Dr. Xinan (Holly) Yang ([home.uchicago.edu/~xyang2/](http://home.uchicago.edu/~xyang2/)) that applies computational analysis to interpret multi-scale data generated from subjects and animal models with arrhythmia and other complex diseases. Passion for knowledge discovery and experience with computation analysis of whole genome and genomic data is essential.

### **Responsibilities:**

- Analyze next generation sequencing data, including whole genome, RNA-Seq, ATAC-seq, Hi-C, and epigenetic data.
- Develop and implement statistical methods and software tools, specifically for analyzing new next generation sequencing data, including single-cell sequencing data. Projects will include network construction and mining.
- Integrate and translate genetic, genomic, knowledge (including developmental, structural, and clinical data) into novel diagnostics, therapeutics and disease mechanisms.
- Communicate progress with PI regularly and contribute to the success of the research team.
- Publish and present novel research findings in academic journals and conferences

### **Requirements:**

- PhD in bioinformatics, computational biology, genomics, computer science, or a related field.
- Programming skills in R, Python, Java, C++, and Unix shell scripting.
- Excellent track record of analyzing next generation sequencing data. Experience in network analysis a plus.
- Demonstrated knowledge of statistics, statistical genetics, bioinformatics concepts, methods and tools. Familiarity with genomic data tools, repositories, and databases.
- Strong attention to detail and solid analytical skills.
- Ability to work hard and independently while contributing to the team effort and adhering to deadlines.
- Excellent oral and written communication skills with track record of productive collaborations.
- Demonstrated ability to work concurrently on several projects, and good understanding of analytic complexities to do independent research as well as assist other researchers.